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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 10715 (1983): Presentation of threaded parts on  
technical drawings [PGD 24: Drawings]

“ज्ञान से एक नये भारत का निर्माण”

Satyanaaranay Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartṛhari—Nītiśatakam

“Knowledge is such a treasure which cannot be stolen”





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*Indian Standard***PRESENTATION OF THREADED PARTS  
ON TECHNICAL DRAWINGS****(ISO Title : Technical Drawings — Conventional  
Representation of Threaded Parts)****National Foreword**

This Indian Standard, which is identical with ISO 6410-1981 'Technical drawings — Conventional representation of threaded parts', issued by the International Organization for Standardization (ISO) was adopted by the Indian Standards Institution on recommendation of the Drawings Sectional Committee and approved by the Engineering Division Council.

IS : 696-1972 'Code of practice for general engineering drawings (second revision)' was originally issued in 1955 and was revised in 1960 as a consequence of the changeover to the metric system of weights and measures. The second revision of IS : 696 was carried out in 1972 to bring the standard more in line with the recommendations published by the Technical Committee TC 10 — Technical Drawing of the International Organization for Standardization.

ISO has published number of standards on various subjects covered in IS : 696-1972. This standard is an adoption of ISO 6410-1981 on the subject superseding the relevant subject matter covered in 3.6 of IS : 696-1972.

Wherever the words 'International Standard' appear, referring to this standard, they should be read as 'Indian Standard'.

**Cross Reference***International Standard*

ISO 128-1982

*Corresponding Indian Standard*IS : 10714-1983 General principles of presentation on  
technical drawings (Identical)

## 1 Scope and field of application

This International Standard specifies the conventional method of simplified representation of threaded parts on technical drawings.

The method is independent of the type of screw thread applied.

The type of screw thread and its dimensions are to be indicated by means of the designations as specified in the relevant International Standards for screw threads.

For reasons of uniformity, the relative disposition of the views in the figures is in accordance with the first angle projection method. It should be understood that alternative projection methods could equally well have been used without prejudice to the principles established.

## 2 Reference

ISO 128, *Technical drawings — General principles of presentation.*<sup>1)</sup>

## 3 Conventional method of representation

### 3.1 Visible screw threads

For visible screw threads, the crests of threads should be defined by a continuous thick line (type A of ISO 128), and the roots of threads by a continuous thin line (type B of ISO 128) (see figures 1, 2, 3 and 4).

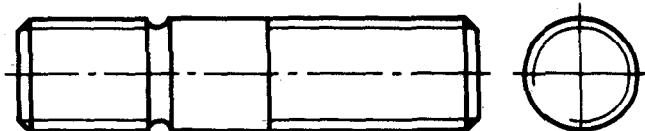


Figure 1

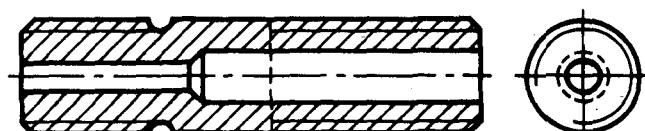


Figure 2

It is recommended that the space between the lines representing the major and minor diameters of the thread be as close as possible to the correct depth of the thread, but in all cases this spacing shall not be less than

- twice the thickness of the thick line,
- 0.7 mm,

whichever is the larger.

### 3.2 Hidden screw threads

For hidden screw threads, the crests and the roots should be defined by dashed lines (type E or F of ISO 128, but one type only on the same drawing) (see figures 3 and 4).

For the recommended spacing between the two dashed lines, see 3.1.

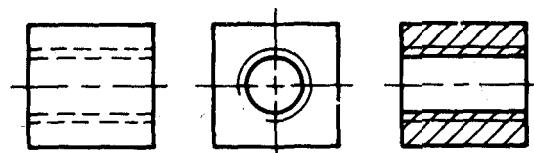


Figure 3

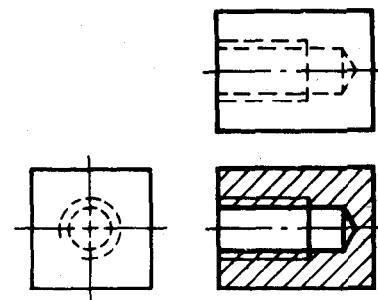


Figure 4

### 3.3 Sections of threaded parts

For threaded parts shown in section, hatching should be extended to the line defining the crests of the thread (see figures 2, 3 and 4).

1) At present at the stage of draft. (Revision of ISO/R 128-1959.)

### 3.4 End view of screw threads

On an end view of a visible screw thread, the thread roots should be represented by a portion of a circle, drawn with a continuous thin line (type B of ISO 128), of length approximately three-quarters of the circumference (see figures 1, 2 and 3).

On an end view of a hidden screw thread, the thread roots should be represented by a portion of a circle, drawn with a dashed line (type E or F of ISO 128, but the same as that used for the crests and one type only on the same drawing), of length approximately three-quarters of the circumference (see figure 4).

For the recommended spacing between the two circles, see 3.1.

### 3.5 Limits of useful length of screw threads

The limit of useful length of a screw thread should be shown by a continuous thick line (type A of ISO 128) or a dashed line (type E or F of ISO 128, but one type only on the same drawing) according to whether this limit is visible or hidden. This line should terminate at the line defining the major diameter of the thread (see figures 1, 2, 4 and 6).

### 3.6 Incomplete threads (run-outs)

Incomplete threads or the limits of useful length are not shown (see figures 1, 2, 4 and 6), except in the case where there is a functional necessity (see figure 5).

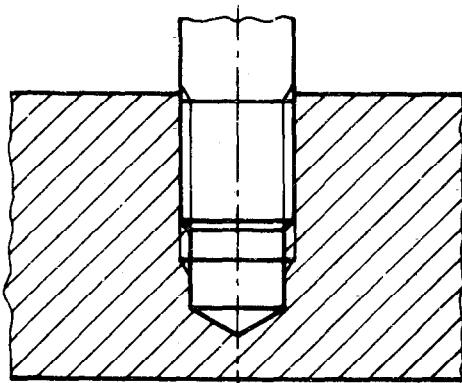


Figure 5

### 3.7 Assembled threaded parts

The above conventions apply to assemblies of threaded parts. However, externally threaded parts should always be shown covering internally threaded parts and should not be hidden by them (see figures 5 and 6).

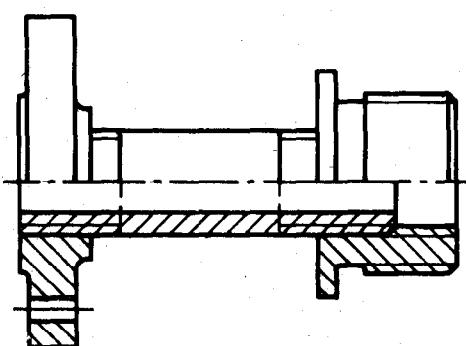


Figure 6

If with complex assemblies the conventional method would not yield a clear picture of the screw threads, it may be replaced by the method depicted in figure 7. It is recommended to show the correct depth of thread, but it is not necessary to draw the correct pitch of thread, nor its exact profile.

The method may also be used for illustrations in publications, etc.

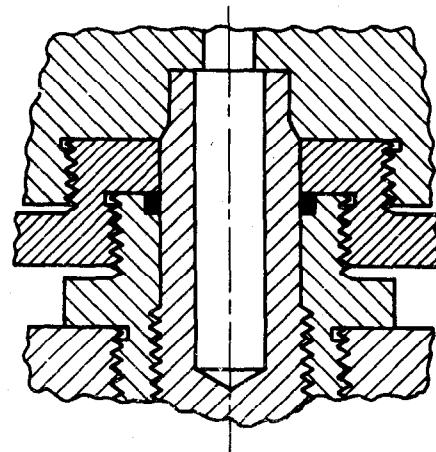


Figure 7